Third United Nations International Conference on the Peaceful Uses of Atomic Energy

A/CONF.28/A/365
USSR
February 1964
Original: RUSSIAN

Confidential until official release during Conference

Abstract

CALCULATION OF SLOW NEUTRON SPECTRA

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The paper reviews the methods of calculation of slow neutron spectra. A multi-group kinetic equation is given for the flux and value of neutrons. Methods were devised thereby the slow neutron spectra can be calculated using the spherical harmonic method, Carlson method and Monte-Carlo method. A comparative analysis is made of the calculations of the neutron spectra by different methods. Angular distributions of the neutron flux are given. The calculation results are compared with the experimental data obtained in the I.V. Kurchatov Atomic Energy Institute.

Translation provided by courtesy of the submitting Government